Target group schedule for A1n/d2n target coil rotation

3/13/2020-3/20/2020

* Preparation before Friday 3/13:
  + Prepare new cell
    - Austin density measurement (Todd)
    - Cell mounting preparation (including RTDs, pNMR coil) (Arun)
  + Parts (cable, optics,…) preparation (Junhao)
  + Make lists of cables to be disconnected, make lables (Junhao/Murchhaha)
* Friday
  + 8:00 – 10:00 Radcon survey.

Before entering the hall we should perform the following tests from the counting house (Mingyu/Murchhana)

* + - AFP Loss in Transverse
    - Cross calibration of L/T
    - Temperature Tests
    - \*Cross calibration position dependence? (Bill will check if this is needed)
    - \*pNMR tests? (Mingyu)
  + 10:00
    - Put Hall in Laser controlled access (JP)
    - Remove panels, 2 or all? Tech? RADCON (RADCON swipes and test)
    - replace photodiode (Junhao) RADCON
    - EPR/NMR calibration, both L and T (Junhao/Todd)
    - Check photodiode/mount effect on NMR (Junhao)
    - Take out of laser controlled access (JP)
  + 13:00
    - Open enclosure completely, if not already (techs/RADCON)
    - Disconnect gas lines for reference cell and cooling jets for target windows, leave cooling jets on for the beam line windows. Includes connections at the pivot and gas panel. (Todd)
    - Disconnect all cabling which affects coil rotation (Junhao/Mingyu)
      * Label all cables at both ends
  + 19:00
    - Remove RTDs (Bill/ Arun)
    - Remove Target Ladder (Bill/ Arun)
    - Remove Target Cell (Bill/ Arun)
* Weekend
  + Mostly Tech work but one expert should be present

Starting at 8 am Saturday

* + - Dismount beam line windows, put in nitrogen bag
    - Disconnect remaining gas lines
    - Match mark locations of vertical correction coils
    - Lower correction coils and RF coils
    - Check everything is clear to rotate
    - Rotate main coils 45 degs. CCW looking down
    - Install correction and RF coils (using match marks)
    - Remote ladder to top platform and move optics table on platform
  + Target group (Sunday)
    - Install new Kepco (Bill)
    - Connect Main coils and corrections coils (Bill/Junhao)
    - Testing power supplies (including new Kepco) and setting fields (Bill/Junhao)
    - Field measurement/checking (Bill?)
* Monday
  + Alignment group, Target group (Murchhana)
    - Survey coil locations
    - Adjust as necessary
    - Survey alignment laser mounts
    - Set up Compass (Murchhana)
    - Survey Compass
    - Remote ladder to top platform and move optics table on platform (if not already done)
    - Set up and perform Compass measurement, (Murchhana and target group swing/owl)
* Tuesday
  + Compass measurements (Target group/Alignment group)
    - Continue compass measurements if not completed (Murchanna)
    - Survey compass results (if measurements complete early enough)
* Wednesday
  + Morning (Alignment group, Techs)
    - Survey compass results (if not done on Tuesday)
    - Remove optics table, Install large ladder
  + Afternoon-swing (target group)
    - Install
      * Gas lines (Todd/Techs)
      * Cabling (Junhao/Mingyu)
      * Target cell (Arun/Bill)
      * Target ladder and (Arun/Bill)
      * Reference cell (Todd)
      * RTDs (Bill)
      * Heating up oven, alignment check (Arun)
    - Check out instrumentation (Junhao/Mingyu)
* Thursday
  + Laser alignment (JP/Junhao/Murchhana)
    - Put hall in laser controlled access
    - Laser alignment
    - Laser polarization check/adjustment
    - Set up for pumping in reverse directions (0 and 270)
  + Spin up
  + EPR calibrations in L and T (Melanie/Junhao)
  + AFP loss study
  + Check pNMR (Mingyu)
* Friday
  + - Close up enclosure (Techs)
    - Out of laser controlled access
  + Ready for beam